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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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10/531,320

04/13/2005

Yuuzou Muramatsu

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EXAMINER

WALKE, AMANDA C

ART UNIT

PAPER NUMBER

1795

NOTIFICATION DATE

DELIVERY MODE

06/17/2008

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ADIPFDD@bipc.com

| | | | |
|------------------------------|--------------------------------------|--|--|
| Office Action Summary | Application No. 10/531,320 | Applicant(s) MURAMATSU, YUUZOU | |
| | Examiner Amanda C. Walke | Art Unit 1795 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 March 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 5-13 is/are rejected.
- 7) ☒ Claim(s) 4 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>4/24/2008</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 3/31/2008 has been entered.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 2, 6-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Murata (2002/0039651) in view of Terauchi et al (JP 2002-194250 in view of its English language translation).

Murata disclose a film for a display (plasma, LCD, CRT, EL, etc.) comprising a transparent substrate, a high refractive index coating, and a low refractive index coating. The high refractive index coating comprises an acrylic resin and an oxide particle of titanium, zinc, antimony, tin, zirconium, or aluminum ([0028]). The low refractive index layer comprises silica or magnesium fluoride particles of 5 to 30 nm ([0029]-[0032]). The high refraction index layer may comprise various acrylic, vinyl, styrene resins or the like, and may comprise additives employed in the hardcoat layer of the reference. The hardcoat employs multifunctional

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(meth)acrylates (preferred) such as trimethylolpropane tri(meth)acrylate (instant claim 13; [0055]). The reference fails to specifically point out acrylic resins that are useful in the invention.

Terauchi et al disclose an active energy ray-curable coating composition curable by irradiation with an active energy ray even in the case of a single layer or a relatively thin film thickness and capable of forming a coating film excellent in hardness, abrasion resistance and transparency and, if required, excellent further in antistaticity. The active energy ray-curable coating composition comprises a polyfunctional acrylate (A) bearing in the molecule at least 6 acryloyl groups and no alkylene ether group, an acrylate (B) bearing in the molecule 2-5 acryloyl groups and no alkylene ether group, an acrylate (C) bearing in the molecule an acryloyl group and an alkylene ether group, and a (meth)acrylic polymer (D) bearing in the molecule an acryloyl group and/or a methacryloyl group, the weight ratio of (A)-(D) is such that (A):(B)=20:80 to 70:30, (C):(D)=10:90 to 90:10 and $((A)+(B))/((C)+(D))=65:35$ to $95:5$ (abstract; [0014], [0040]). According to section [0023], C of the reference corresponds to the instant A, and in section [0021], it can be determined that the instant B is reference B. Given the data above, it appears that the total amount of B and C would be at least 30% of the total and that the ratio of the two would fall within the instantly claimed range (20:80 to 80:20). The composition also comprises a binder polymer (F) and inorganic filler particle that may be silica, TiO_2 , the tin oxide, zirconium oxide, magnesium fluoride, antimony oxide, a zinc oxide, tungstic oxide, and others (G; [0042]).

The material is cured upon coating using electron beam, gamma, beta, or alpha rays, or UV ([0046]).

It would have been obvious to one of ordinary skill in the art to prepare the material of the reference choosing to employ the resins B and C is amounts falling within the scope of the instant claim limitations.

Given the teachings of the references it would have been obvious to one of ordinary skill in the art to prepare the material of Murata choosing to employ the known monomers of Terauchi et al in the high refractive index layer of Murata in combination with the multifunctional (meth)acrylates).

4. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Murata (2002/0039651) in view of Terauchi et al and Maeda et al (4,572,888).

Murata and Terauchi et al have been discussed above. The reference fails to specifically point out acrylic resins that are useful in the invention.

Maeda et al disclose a UV sensitive photopolymerizable resin comprising (meth)acrylic resins such as many of those mentioned to be useful by Murata. In addition to those listed by Murata, the reference teaches that other known and useful acrylic unsaturated compounds include the ethylene oxide adduct of trimethylol propane triacrylate. Its use increases the adhesive properties of the material.

Given the teachings of the references it would have been obvious to one of ordinary skill in the art to prepare the material of Murata in view of Terauchi et al choosing to employ the known monomer of Maeda et al.

5. Claim 4 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and

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any intervening claims. The prior art of record fails to fairly teach or suggest the mixture of claim 4.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Amanda C. Walke whose telephone number is 571-272-1337. The examiner can normally be reached on M-R 5:30-4.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cynthia Kelly can be reached on 571-272-1526. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Amanda C Walke
Primary Examiner
Art Unit 1795

/Amanda C Walke/
Primary Examiner, Art Unit 1795